Notice of Allowability	Application No.	Applicant(s) SMITH ET AL. Art Unit	
	10/614,581		
	Examiner		
	ANH PHUNG	2024	
The MAILING DATE of this communication appears All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL85). NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313. 1. This communication is responsive to	oars on the cover sheet wi (OR REMAINS) CLOSED in or other appropriate commu GHTS. This application is so and MPEP 1308.	th the correspondence addr	ess ed course. THIS e at the initiative
2. The allowed claim(s) is/are <u>1-25</u> .			
3. The drawings filed on <u>07 July 2003</u> are accepted by the Exa	aminer.		
4. Acknowledgment is made of a claim for foreign priority und a) All b) Some* c) None of the: 1. Certified copies of the priority documents have be compared to the certified copies of the priority documents have be compared to the certified copies of the priority documents have be compared to the certified copies of the priority documents have be compared to the certified copies of the priority documents have be compared to the certified copies of the certified copies of the certified copies not received: Applicant to the certified copies and received:	peen received. Deen received in Application Iments have been received	No in this national stage application	
Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONMEI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. A SUBSTITUTE OATH OR DECLARATION must be submitted INFORMAL PATENT APPLICATION (PTO-152) which gives recommended.		•	
INFORMAL PATENT APPLICATION (PTO-152) which gives n 6. CORRECTED DRAWINGS (as "replacement sheets") must be (a) including changes required by the Nation (5.7).	eason(s) why the oath or de	INER'S AMENDMENT or NOT eclaration is deficient.	TICE OF
(a) including changes required by the Notice of Darkton	e submitted.		
(a) ☐ including changes required by the Notice of Draftsperson' 1) ☐ hereto or 2) ☐ to Paper No./Mail Date	s Patent Drawing Review (PTO948) attached	
(b) ☐ including changes required by the attached Examiner's Ar Paper No./Mail Date	mendment / Comment or in	the Office action of	
each sheet. Replacement sheet(s) should be labeled as such in the ho	e)) should be written on the d eader according to 37 CFR 1.	rawings in the front (not the bac 121(d).	ck) of
DEPOSIT OF and/or INFORMATION about the deposit of attached Examiner's comment regarding REQUIREMENT FOR	BIOLOGICAL MATERIA THE DEPOSIT OF BIOLOG	L must be submitted. Note the GICAL MATERIAL.	ne
Attachment(s) 1. ☑ Notice of References Cited (PTO-892)		·	
2. Notice of Draftperson's Patent Drawing Review (PTO948)	5. ☐ Notice of Informa	al Patent Application (PTO-152	2)
 3. ☑ Information Disclosure Statements (PTO1449 or PTO/SB/08), Paper No./Mail Date 07/07/2003 4. ☐ Examiner's Comment Regarding Requirement for Deposit 	Paper No./Mail [7.	ary (PTO-413), Date Idment/Comment	
of Biological Material	 8. ☑ Examiner's Stater 9. ☑ Other <u>Search Hist</u> 	ment of Reasons for Allowance	e
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U.S. Patent and Trademark Office PTOL-37 (Rev. 1-04)	AN PRIMAR	H PRUNG TY EXAMINER	

DETAILED ACTION

1. The Restriction Requirement dated September 16, 2004, is withdrawn, therefore, claims **1-25** are pending in the application.

Information Disclosure Statement

This office acknowledges receipt of the following items from the Applicant:
 Information Disclosure Statement (IDS) filed on July 7, 2003.
 Information disclosed and listed on PTO 1449 was considered.

Examiner's Statement of Reasons for Allowance

3. Claims **1-25** are allowed.

Sharma et al. (US 6,754,097), Baker (US 6,741,490), Lu et al. (US 6,522,576), Thewes et al. (US 6,487,109) and Hoffmann et al. (US 6,388,917) disclose a MRAM device having a read-out circuit similar to that of the present application, but fail to teach:

"a first memory cell string that includes at least a first memory cell coupled to a second memory cell; and a circuit coupled to a node between the first memory cell and a second memory cell, the circuit configured to detect a voltage change at the node in response to a voltage being provided to the memory cell string and the first memory cell being written to a first state" as claimed in the independent claim 1; or

"providing a voltage to the memory cell string; measuring a first voltage at a node between the first and second memory cells; writing the first memory cell to a first state; measuring a second voltage at the node; and determining whether the first voltage differs from the second voltage" as claimed in the independent claim 12; or

"a first memory cell; a second memory cell coupled to the first memory cell; a transistor coupled to a node between the first and second memory cells and coupled to a bit line associated with the first memory cell; a means coupled to the bit line for detecting a voltage change at the node in response to a first voltage being provided to the first and second memory cells; the first memory cell being written to a first state; and a second voltage being provided to the transistor" as claimed in the independent claim 18.

Any comments considered necessary by applicants must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comment on Statement of Reasons for Allowance".

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **ANH PHUNG** whose telephone number is **(571) 272-1883**. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD ELMS, can be reached on (571) 272-1869. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for Application/Control Number: 10/614,581

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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AKP

ANH PHUNG PRIMARY EXAMINER

Cuch Phung